

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P27886/WO KE</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/001225</b>	International filing date (day/month/year) <b>10.02.2004</b>	Priority date (day/month/year) <b>27.03.2003</b>	
International Patent Classification (IPC) or national classification and IPC			
Applicant <b>ROHDE &amp; SCHWARZ GMBH &amp; CO. KG</b>			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>13</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input checked="" type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-15 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-12 \_\_\_\_\_ received by this Authority on 27.01.2005 with letter of 27.01.2005
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/4-4/4 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☒ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☒ the claims, nos. 7-8 \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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## Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 7-8

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☒ the claims, or said claims Nos. 7-8 are so inadequately supported  
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. \_\_\_\_\_

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☒ See Supplemental Box for further details.

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-12	NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
2.	<p>This report makes reference to the following document, cited in the search report; the same numbering will be used throughout the procedure:</p> <p>D1: CA-A-2 255 047 (IBM CANADA) 30 May 2000 (2000-05-30).</p>		
3. Inventive step, independent method claim 1			
3.1	<p>Document D1 is considered to be the closest prior art. Said document discloses, as set out in claim 1 (the references between parentheses refer to D1; the original wording of the claim is indicated in <i>italics</i>; features that are not explicitly described in D1 are <del>struck through</del>; differences between claim 1 and D1 are <u>underlined</u>), <i>a method for determining deviations (page 1, line 5-6) in a modular end-system message generated in a hierarchical end system in a telecommunications device, (page 1, lines 26-29: "modified file" and figure 1, right-hand side: "PersonFile2.xml") relative to a reference message (page 1, lines 26-29: "base file" and figure 1, left-hand</i></p> <p style="text-align: right;">/...</p>		

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

side "PersonFNe.xml"), said method comprising the following method steps:

- inputting a reference message (page 10, line 20-21: "base ... XML file" and page 13, line 11: "the two input files");
- inputting an end-system message generated in the end system (page 10, lines 20-21: "modified XML file" and page 13, line 11: "the two input files");
- analysing the message structure of the reference message (page 10, lines 20-21: "the two files are parsed and two parse trees obtained");
- analysing the message structure of the generated end-system message (page 10, line 20-21: "the two files are parsed and two parse trees obtained");
- determining deviations of the end-system message relative to the reference message (page 6, line 7-21: "comparison of differencing trees") with regard to the structure and the values for the parameters of the structural elements (page 9, lines 3-9 in combination with page 10, lines 1-6 and figure 3(42) and ((52)); and
- outputting structural elements that deviate relative to the reference message, indicating the values of the parameters of each

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

*structural element* (page 9, lines 3-9 in combination with page 10, lines 1-6) and in figure 3 ((42) and (52)) *of the end-system message generated in the end system* (page 9, lines 11-13; page 13, lines 17-18 and figure 3).

3.2 Thus, the subject matter claim 1 differs from the prior art disclosed in D1 in that the end-system message is generated by a telecommunications device.

3.3 The application of the method for comparing XML documents, as per D1, to an end-system message generated by a telecommunications device constitutes just one application of the general method according to D1 to messages in the field of telecommunications. According to the description (see page 7, lines 11-19 and figure 3(7)) all messages in the claimed method are stored in XML format.

In consequence, the only difference between claim 1 and D1 is the fact that the XML description language according to D1 is applied to the structured representation of the content of messages from within the field of telecommunications.

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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3.4 Therefore, pursuant to the PCT Guidelines, paragraph 13.14(a)(v), the subject matter of claim 1 is **not** considered **inventive** (PCT Article 33(3)).

4. **Inventive step, dependent claims 2-8**

**Dependent claims 2-8** do not appear to contain any additional features which, combined with the features of any claim to which they refer, meet the PCT requirements for inventive step. The reasons are as follows:

- **Claims 2-4:** in document D1, the following colour codings are used in order to indicate the differences between structural elements of the reference message and the message to be compared therewith (page 8, line 25-27 and figure 3):  
  
black: identical in the reference message and the message to be compared therewith;  
  
red: present only in the reference message, not in the message to be compared therewith;  
  
blue: present only in the message to be compared, not in the reference message.
- **Claim 5:** the structural elements in D1 are shown as being hierarchical (page 3, lines 19-20 and figure 3(30)).

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

- **Claim 6:** in D1, the output is displayed in a first area of the screen (page 8, line 23-25 and figure 3(30)).
- **Claims 7 and 8:** according to document D1 structural elements of the message to be compared (page 2, line 19 and figure 3(50)) and of the reference message (page 2, line 18 and figure 3(40)), respectively, are displayed in further areas of the screen (page 8, lines 25-27).

Therefore, **claims 2-8 are not inventive** (PCT Article 33(3)).

**5. Inventive step, claims 9-12**

The objections in relation to the lack of inventive step in method claims 1-8 also apply in a similar manner to the digital storage medium with control signals that can be read out electronically according to **claim 9**, which storage medium can be implemented only by means of the method steps according to claims 1-8.

The objections in relation to the lack of inventive step in method claims 1-8 also apply in a similar manner to the computer program according to **claims 10-11**, which program contains only program-code means for carrying out the method

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Box No. V

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

steps according to claims 1-8 regardless of whether the program is executed on a computer or stored on a machine-readable data carrier.

The objections in relation to the lack of inventive step in method claims 1-8 also apply in a similar manner to the computer program product according to **claim 12**, which computer program contains only program-code means for carrying out the method steps according to claims 1-8.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. VI** Certain documents cited

## 1. Certain published documents (Rule 70.10)

Application No.  
Patent No.Publication date  
(day/month/year)Filing date  
(day/month/year)Priority date (valid claim)  
(day/month/year)

## 2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure  
(day/month/year)Date of written disclosure  
referring to non-written disclosure  
(day/month/year)

**Box No. VII      Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

- 6.1      Contrary to PCT Rule 5.1(a)(ii), the description does not cite document D1 or indicate the relevant prior art disclosed therein.
- 6.2      Independent **claims 1 and 9-12** have not been drafted in the two-part form defined by PCT Rule 6.3(b). However, in the present case the two-part form would appear to be appropriate. Accordingly, the features known in combination from the prior art (document D1) should have been placed in the preamble (PCT Rule 6.3(b)(i)) and the remaining features specified in the characterising part (PCT Rule 6.3(b)(ii)).

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. VIII** Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- 7.1 The reference signs "24.1<sub>END</sub>, 24.1.1<sub>END</sub> and 28" are use in the description (see page 12, line 14) to refer to the structural elements that are present only in the end-system message. However, this is inconsistent with the use (see page 12, lines 31-32) of the reference signs "24.1<sub>END</sub>, 24.1.1<sub>END</sub> and 27" to refer to the same structural elements.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

**Box III**

1. The amendments submitted with the letter of 27 May 2005 introduce substantive matter which, contrary to PCT Article 34(2)(b), goes beyond the disclosure in the international application as filed. The amendments, in claims 7-8, are as follows:

in claims 7-8: although the text "giving detailed information about the data flow" inserted into claims 7-8, is supported by an example in the description (page 13, line 27 to page 14, line 2) and in figure 5 ((30)-(32)), this does not support the substantially greater scope of protection according to the aforementioned generalised formulation. Therefore, in carrying out the substantive examination of claims 7-8, said amendment has been disregarded.